

## REMARKS

Claims 18-36 have been canceled without prejudice or disclaimer. Claims 37-51 have been added and therefore are pending in the present application. Claims 37-51 are supported throughout the specification, including the original claims. For example, in claim 37, the divalent salt calcium chloride is supported by page 5, line 26; the concentration of calcium chloride is supported by page 6, lines 1-2; and the pH range in the pH adjustment step is supported by claims 12 and 13. Also, the concentrations of calcium chloride recited in claims 38-40 are supported by, e.g., page 7, lines 7-8, page 8, lines 3-4, and page 9, lines 1-2 of the specification.

It is respectfully submitted that the present amendment presents no new issues or new matter and places this case in condition for allowance. Reconsideration of the application in view of the above amendments and the following remarks is requested.

### I. Information Disclosure Statement

The Office Action states a proper 1149 was submitted on 11/16/2007 which has been considered by the Examiner. However, the Office Action also states that the "Information disclosure statement, also filed 11/16/2007, fails to comply with 37 CFR 1.98(a)(1)." Applicants respectfully request clarification of the objection to the information disclosure statement.

On November 16, 2007, Applicants filed an information disclosure statement which referenced Form PTO/SB/08A listing two references, i.e., U.S. Patent No. 4,782,046 and EP 1522579. A copy of Form PTO/SB/08A initialed by the Examiner was attached to the Office Action. Therefore, it appears that the Examiner has considered each of the references cited by Applicants. If the Examiner has not considered a reference, Applicants respectfully request that the Examiner identify the reference.

Applicants also note that in the Information Disclosure Statement, Applicants drew the Examiner's attention to a rejection made in the parent application (no. 10/463,919) under 35 U.S.C. 103 over Abdo (U.S. Patent No. 3,711,462) and Weigel et al. (EP 1522579). Both references are of record.

### II. The Objection to Claim 30

The Office objected to claim 30 due to a grammatical error. Claim 30 has been canceled without prejudice or disclaimer. Therefore, this objection is rendered moot.

### III. The Rejection of Claim 36 under 35 U.S.C. 112

Claim 36 is rejected under 35 U.S.C. 112 as being indefinite. Specifically, the Office objected to the recitation "after step (e)" in line 2. Claim 36 has been canceled without prejudice or disclaimer. Therefore, this rejection is rendered moot.

### IV. The Rejection of Claims 18-36 under 35 U.S.C. 103

Claims 18-36 are rejected under 35 U.S.C. 103 as being unpatentable over Weigel *et al.* (WO 99/23227) in view of Kanani *et al.* (U.S. Patent No. 3,878,093) and Laustsen *et al.* (U.S. Application Publication No. US 2002/0020668). Since the Examiner discussed Capiou *et al.* (U.S. Patent No. 6,106,842) in the rejection and not Kanani *et al.*, Applicants assume that the Examiner intended to reject claims 18-36 as being unpatentable over Weigel *et al.* in view of Capiou *et al.* and Laustsen *et al.* This rejection is respectfully traversed.

Weigel *et al.* disclose recombinant methods of producing hyaluronic acid in bacterial cells. Moreover, Weigel *et al.* teach that cells can be separated from a fermentation broth by the addition of trichloroacetic acid to flocculate the cells and associated debris (page 63, lines 17-23).

However, as the Examiner acknowledges, Weigel *et al.* do not teach or suggest the addition of calcium chloride as a flocculating agent to a fermentation broth to flocculate *Bacillus* cells.

Capiou *et al.* disclose a process of extracting a cell-bound protein of bacterial origin having utility as antigenic factors of component or acellular vaccines, comprising contacting a suspension of the cell-bound protein with a flocculating agent prior to heat treatment. Capiou *et al.* further disclose that divalent salts, such as calcium chloride, are preferred flocculating agents. At column 4, lines 40-45, Capiou *et al.* disclose that the flocculation occurs under controlled pH conditions. Thus, the pH of the supernatant is adjusted to between 4 and 10, preferably between 8.5 and 9.5.

However, Capiou *et al.* do not teach or suggest method of producing a glycosaminoglycan, which is not a cell-bound protein of bacterial agent. Moreover, Capiou *et al.* do not teach or suggest the adjustment of the pH of the fermentation broth following the addition of calcium chloride, as claimed herein.

Moreover, as demonstrated in the examples of the instant application, addition of calcium chloride followed by pH adjustment results in a high yield of glycosaminoglycan. Moreover, the glycosaminoglycan is more stable at the conditions used in Applicants' process.

Laustsen *et al.* disclose a microfiltration process of a fermentation-derived product, comprising adding activated carbon to a solution of the fermentation-derived product.

However, Laustsen *et al.* also do not teach or suggest method of producing a glycosaminoglycan. Moreover, Laustsen *et al.* do not teach or suggest the addition of calcium chloride to the fermentation broth followed by an adjustment of the pH of the fermentation broth.

For the foregoing reasons, Applicants submit that the claims overcome this rejection under 35 U.S.C. 103. Applicants respectfully request reconsideration and withdrawal of the rejection.

#### V. Conclusion

In view of the above, it is respectfully submitted that all claims are in condition for allowance. Early action to that end is respectfully requested. The Examiner is hereby invited to contact the undersigned by telephone if there are any questions concerning this amendment or application.

Respectfully submitted,

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